

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
24 December 2003 (24.12.2003)

PCT

(10) International Publication Number
WO 2003/107612 A3

(51) International Patent Classification⁷: H04B 7/06, 7/08

(21) International Application Number:

PCT/IB2003/002301

(22) International Filing Date: 27 May 2003 (27.05.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

02077331.3

13 June 2002 (13.06.2002) EP

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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

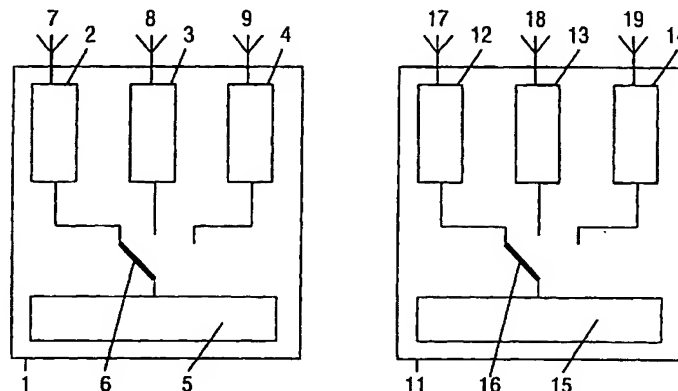
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:

4 March 2004

[Continued on next page]

(54) Title: TELECOMMUNICATION SYSTEM WITH SWITCHED TRANSMIT/RECEIVE CHAINS FOR UNCORRELATING CORRELATED NOISE



(57) Abstract: Telecommunication systems comprising transmitting units (1) and receiving units (11), with units (1 resp. 11) comprising parallel chains (2-4 resp. 12-14) coupled to processing parts (5 resp. 15), have enhanced data rates / channel capacities, under the assumption that the noise in the chains (2-4 resp. 12-14) is uncorrelated. Correlated noise from external noise sources decreases said rates / capacities. By coupling said chains (2-4 resp. 12-14) to said processing parts (5 resp. 15) via switches (6 resp. 16) for uncorrelating correlated noise in said chains (2-4 resp. 12-14), any correlated noise present in chains (2-4 resp. 12-14) is made uncorrelated. Said switch (30,50,70) (over/sub)samples chain signals, and is further coupled to said processing part (32,52,72) for controlling purposes to switch randomly or programmedly, with said processing part (32,52,72) and said switch (30,50,70) operating synchronically. Said switch (30,50,70) comprises a (de)multiplexer, with a chain comprising at least an antenna (21,22,41,42,61,62) and possibly an amplifier (25,26,43,44) and a mixer (27,28) coupled via said switch (30,50,70) to said processing part (32,52,72) comprising at least a filter (37,57,77), a converter (38,58,78) and a processor (39,59,79) and possibly said mixer (56,76) and said amplifier (75).



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INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 03/02301

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H04B7/06 H04B7/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04B H01Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 057 758 A (ADACHI FUMIYUKI ET AL) 8 November 1977 (1977-11-08) column 2, line 8 - line 19 column 2, line 39 - line 49; figure 1 column 3, line 23 - line 61; figures 3-8	1-12
A	TAYLOE D R: "SPACE DIVERSITY HOPPER FOR DIGITAL DATA TRANSMISSION" MOTOROLA TECHNICAL DEVELOPMENTS, MOTOROLA INC. SCHAUMBURG, ILLINOIS, US, vol. 10, 1 March 1990 (1990-03-01), pages 62-63, XP000114646 ISSN: 0887-5286 page 62, paragraph 3 - paragraph 4; figure 1	1-12



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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Date of the actual completion of the international search

17 December 2003

Date of mailing of the international search report

29/12/2003

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 03/02301

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 196 21 199 A (BOSCH GMBH ROBERT) 27 November 1997 (1997-11-27) column 3, line 12 - line 35; figures 1,2 -----	1-12
A	JAKES W C: "A COMPARISON OF SPECIFIC SPACE DIVERSITY TECHNIQUES FOR REDUCTION OF FAST FADING IN UHF MOBILE RADIO SYSTEMS" IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, IEEE INC. NEW YORK, US, vol. VT-20, no. 4, 1 November 1971 (1971-11-01), pages 81-92, XP002052299 ISSN: 0018-9545 chapter B.3) figure 5 -----	1-12

INTERNATIONAL SEARCH REPORT

Information on patent family members

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